

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of receiving radio signals in a receiver (2) for a digital wireless communications system, the method comprising the steps of:

level adjusting a received radio signal by an automatic gain control (12); and
despreading the level adjusted signal in a RAKE unit (14) having a number of fingers, thus providing a number of despread data symbols, each despread data symbol being represented by a first number of bits₁, ~~characterized in that the method further comprises the step of~~

truncating the despread data symbols provided from the RAKE unit (14) to obtain truncated data symbols represented by a second number of bits, said second number being smaller than said first number, wherein the second number of bits are selected as the least significant bits of the first number of bits representing a despread data symbol;

saturating the truncated data symbols to obtain saturated data symbols by replacing a truncated data symbol with the highest value that can be represented by the second number of bits, if the value of the despread data symbol from which that truncated data symbol was obtained is larger than said highest value, and replacing a truncated data symbol with the lowest value that can be represented by the second number of bits, if the value of the despread data symbol from which that truncated data symbol was obtained is less than said lowest value; and

level adjusting the despread data symbols provided from the RAKE unit (14) in dependence of said despread data symbols, so that overflow for the truncated data symbols is prevented.

2. (Currently Amended) A method according to claim 1, characterized in that said step of level adjusting the despread data symbols provided from the RAKE unit (14) comprises the step of measuring the level of the despread data symbols.

3. (Currently Amended) A method according to claim 1, ~~characterized in that said step of further comprising the steps of:~~
measuring the level of the saturated data symbols; and
then level adjusting the despread data symbols provided from the RAKE unit (14) ~~comprises based on the measured step of measuring the level of the saturated data symbols.~~

4. (Currently Amended) A method according to ~~any one of claims~~ claim 1 ~~characterized in that~~ wherein said level adjusting of the despread data symbols is performed by adjusting a reference value of said automatic gain control (12).

5. (Currently Amended) A method according to ~~any one of claims~~ claim 1 ~~characterized in that~~ wherein said level adjusting of the despread data symbols is performed by adjusting the level of each despread data symbol individually in dependence of that despread data symbol.

6. (Currently Amended) A method according to ~~any one of claims~~ claim 1 ~~characterized in that~~ wherein said level adjusting is based on the largest of an in-phase component and a quadrature component of said despread data symbols.

7. (Currently Amended) A method according to ~~any one of claims~~ claim 1 ~~characterized in that~~ wherein said level adjusting is based on data symbols averaged over time.

8. (Currently Amended) A method according to ~~any one of claims claim 1 characterized in that~~ wherein said level adjusting is performed by using a Proportional-Integral control algorithm.

9. (Currently Amended) A method according to ~~any one of claims claim 1 characterized in that~~ wherein said level adjusting is performed by selecting one of two different adjustment levels.

10. (Currently Amended) A receiver ~~(2)~~ for receiving radio signals in a digital wireless communications system, the receiver having means for ~~[[:]]~~ level adjusting a received radio signal by an automatic gain control ~~(12)~~; and despreading the level adjusted signal in a RAKE unit ~~(14)~~ having a number of fingers, thus providing a number of despread data symbols, each despread data symbol being represented by a first number of bits, ~~characterized in that the receiver further comprises~~ comprising:

means for truncating the despread data symbols provided from the RAKE unit ~~(14)~~ to obtain truncated data symbols represented by a second number of bits, said second number being smaller than said first number, wherein the second number of bits are selected as the least significant bits of the first number of bits representing a despread data symbol;

means for saturating the truncated data symbols to obtain saturated data symbols by replacing a truncated data symbol with the highest value that can be represented by the second number of bits, if the value of the despread data symbol from which that truncated data symbol was obtained is larger than said highest value~~[[, and]]~~:

means for replacing a truncated data symbol with the lowest value that can be represented by the second number of bits, if the value of the despread data symbol from which that truncated data symbol was obtained is less than said lowest value; and

means for level adjusting the despread data symbols provided from the RAKE unit ~~(14)~~ in dependence of said despread data symbols, so that overflow for the truncated data symbols is prevented.

11. (Currently Amended) A receiver according to claim 10, ~~characterized in that it is~~ adapted to adjust the level of the despread data symbols provided from the RAKE unit (14) by means of measuring the level of the despread data symbols.

12. (Currently Amended) A receiver according to claim 10, ~~characterized in that it is~~ adapted to:
measure the level of the saturated data symbols; and
then adjust the level of the despread data symbols provided from the RAKE unit (14) ~~by means of measuring~~ based on the measured level of the saturated data symbols.

13. (Currently Amended) A receiver according to claim 10 ~~any one of claims 10 to 12, characterized in that it is~~ adapted to adjust the level of the despread data symbols by adjusting a reference value of said automatic gain control (12).

14. (Currently Amended) A receiver according to claim 10 ~~any one of claims 10 to 12, characterized in that it is~~ adapted to adjust the level of the despread data symbols by adjusting the level of each despread data symbol individually in dependence of that despread data symbol.

15. (Currently Amended) A receiver according to claim 14 ~~any one of claims 10 to 12, characterized in that it is~~ adapted to base said level adjusting on the largest of an in-phase component and a quadrature component of said despread data symbols.

16. (Currently Amended) A receiver according to claim 10 ~~any one of claims 10 to 15, characterized in that it is~~ adapted to base said level adjusting on data symbols averaged over time.

17. (Currently Amended) A receiver according to claim 8 ~~any one of claims 8 to 13, characterized in that~~ it is adapted to perform said level adjusting by using a Proportional-Integral control algorithm.

18. (Currently Amended) A receiver according to claim 10 ~~any one of claims 10 to 17, characterized in that~~ it is adapted to perform said level adjusting by selecting one of two different adjustment levels.

19. (Currently Amended) A receiver according to claim 10 ~~any one of claims 10 to 18, characterized in that~~ wherein the receiver is a WCDMA receiver.

20. (Currently Amended) A computer program comprising program code means for performing the steps of to claim 1 ~~any one of claims 1 to 9~~ when said computer program is ~~run~~ stored on a computer readable medium and executed by a processor on a computer.

21. (Currently Amended) A computer readable medium having stored thereon program code means for performing the method of claim 1 ~~any one of claims 1 to 9~~ when said program code means is ~~run~~ stored on a computer readable medium and executed by a processor on a computer.